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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,066	07/24/2000	Rajesh B Amin	12310RRUS01U(22171.223)	6469

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EXAMINER

TRAN, LAMBERT L

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 12/05/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Page

Office Action Summary	Application No. 09/624,066	Applicant(s) AMIN ET AL.	
	Examiner Lambert L. Tran	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-78 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

1. This Office action is in response to the application filed on 24 July 2000.

Priority

2. Acknowledgment is made of Applicant's claim for priority based upon Divisional Application No. 09/434628 filed on 05 November 1999.
3. The effective filing date for the subject matter defined in the pending claims in this application is 05 November 1999.

Specification

4. The ABSTRACT of the disclosure is objected to because of the following informalities: The first line of the ABSTRACT is "*A method and system **to** for a communications network...*" should be changed to: "*A method and system for a communications network...*". Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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7. In regard to claim 15, the claim limitation recites: "*The method of claim 1 further including sending communications from a layer 3...*". It is not clear what the layer 3 referred to, nor is it defined in the Specification. For the purpose of prosecution, the Examiner hereinafter will assume the layer 3 referred to the Network Layer of the OSI (Open Systems Interconnection) reference model.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorgensen, U.S. Patent No 6,452,915, in view of Hanson et al., U.S. Patent No 6,546,425, hereinafter referred to as Hanson.

10. In regard to claims 1, 46, Jorgensen disclosed:
accessing the network to establish a point of presence at an access management layer and a core portion of the network and to designate a default amount of bandwidth and a plurality of default setup parameters (wireless base station sets up default bandwidth and parameters) [see Jorgensen, col. 3, lines 34-38];
invoking service through (a session) an allied application server on the network to establish an amount of network resources requested by the first user [see Jorgensen, col. 3, lines 39-47].

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distributing a service session management functions among a plurality of components within the IP centric distributed network (gatekeeper) [see Jorgensen, col. 36, lines 46-67].

11. However, Jorgensen did not expressly disclose: *establishing a transport session to create and manage a connection from the first user to a destination address*. In the same field of wireless communication, Hanson disclosed:

establishing a transport session to create and manage a connection from the first user to a destination address [see Hanson, col. 4, lines 39-49, col. 11, lines 23-35]. An ordinary artisan in the art at the same time the invention was made, would have been motivated to look to a way to provide more efficient use of available bandwidth through packet switching, since circuit switching allocates bandwidth between communicating nodes whether or not traffic is constantly being transferred between the nodes, thus using communications bandwidth rather inefficiently [see Jorgensen, col. 2, lines 60-65].

12. Accordingly, it would have been obvious to one of ordinary skill in the wireless communications art at the time the invention was made to have incorporated Jorgensen teachings of IP-flow classification in wireless telecommunications with Hanson's teachings of establishing transport session to create and manage connection, for the purpose of providing a seamless solution transparently addresses the characteristics of nomadic systems, and enables existing network application to run reliably in mobile environments.

13. In regard to claims 2, 9, 3, 5, 10, 26-33, 36-41, 53-55, Jorgensen disclosed: *network service function layer, local service function layer; private; public network, point-to-point protocol* (data network in LAN, WAN, Internet, wireless broadband, VPN) [see Jorgensen, col.

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28, lines 52-67, col. 27, lines 44-67, col. 34, lines 51-61, col. 60, lines 12-15, col. 79, lines 35-52, col. 43, lines 25, 27, col. 75, 22-26, col. 76, lines 39-44].

14. In regard to claims 4, 6, 7, 8, 11, Jorgensen disclosed: *service layers includes an access service function layer; access service function layer accommodates a plurality of technologies used for the first user to communicate to the network; mobility manager* [see Jorgensen, col. 3, lines 34-47].

15. In regard to claims 12-13, 22-23, Jorgensen disclosed: *quality of service parameters and an amount of bandwidth; utilizes a plurality of protocols to deliver a requested quality of service for latency; utilizes a plurality of protocols to deliver a requested bandwidth* [see Jorgensen, col. 13, lines 26-42, col. 67, lines 14-22].

16. In regard to claims 14, 15 (as understood), 16-19, 47-52, Hanson disclosed: *an application layer at the first user; sending communications from a layer 3 at the first user; interface layer of the access layer; converting incoming protocols of incoming communications to a protocol understood by the first user; delivers incoming protocols; a connection management server that can transport communications on a plurality of backbone infrastructures* (standard mobile devices, standard network applications, available suite of transport level protocols, RPC) [see Hanson, col. 8, lines 6-34].

17. In regard to claims 20-21, Jorgensen disclosed: *communications on a point-to-point basis; point to multi-point basis* [see Jorgensen, col. 79, lines 38-39, ABSTRACT].

18. In regard to claims 24-25, 34-35, 56, Jorgensen disclosed: *deciding policy parameters; enforcing policy parameters; providing subscriber management and policy; decision services are provided* (policy manager, policy based information) [see Jorgensen, col. 77, lines 1-12].

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19. In regard to claims 42-45, 57-59, 66-67, 70-75, Jorgensen disclosed: *accounting and billing policies; accounting clients at the application servers; accounting clients at the access management; a storage device to fetch collected data in order to create a customer billable record* [see Jorgensen, col. 77, lines 34-62, col. 63, lines 40-41, col. 78, lines 9-20].

20. In regard to claims 60-65, 68-69, the combination inventions of Jorgensen and Hanson disclosed: *core network provides routing functions; provides connection types; provides handling of multimedia sessions and accounting; support for multiple xANs where each xAN is associated with a different technology (execute client software); forwards data sent; mobility management; routes data to the first user via an IP address; supports access to multiple network service layers* [see Jorgensen, col. 36, lines 9-26, col. 36, lines 65-67, see Hanson, col. 3, lines 34-67, col. 8, lines 20-34].

21. In regard to claims 76-78, the combination inventions of Jorgensen and Hanson disclosed:

a network service (WAN) function layer within the wireless network, wherein the network service layer includes:

a policy management server (process, manager, module) [see Jorgensen, col. 77, line 1];

a service accounting server [see Jorgensen, col. 77, lines 34-40];

an authentication, authorization and accounting server [see Jorgensen, col. 77, lines 31-32];

an unified directory within a directory server (directory enabled networking, LDAP) [see Jorgensen, col. 77, lines 50-52];

a security gateway [see Jorgensen, col. 78, lines 9-11];

and a mobility manager [see Hanson, col. 10, lines 8-12];

a local (LAN) service function layer associated with the network service function layer within the wireless network, wherein the local service function layer includes:

an authentication, authorization and accounting server [see Jorgensen, col. 77, line 1];

a security gateway [see Jorgensen, col. 78, lines 9-11];

a policy enforcement server [see Jorgensen, col. 77, line 1];

a mobility manager [see Hanson, col. 10, lines 8-12];

a network management server [see Jorgensen, col. 36, lines 9-19];

and a wireless gateway [see Jorgensen, col. 36, lines 46-50];

an access management layer associated with the local service function layer, wherein the access management layer includes:

a location tracking server (base station) [see Jorgensen, ABSTRACT];

a connection management server (base station) [see Jorgensen, ABSTRACT];

a plurality of protocol servers (standard network applications) [see Hanson, col. 8, lines 24-25];

a RF management server which includes power control, traffic control and channel assignment;

an access management server includes access, termination and paging (base station) [see Jorgensen, ABSTRACT];

a domain database server which provides a local decision point to expedite service invocation for the first user [see Jorgensen, col. 25, lines 61-67];

a policy enforcement server [see Jorgensen, col. 77, line 1];

a network management server [see Jorgensen, ABSTRACT]; and

a resource management server [see Jorgensen, ABSTRACT];
and an access interface layer associated with the access management layer, wherein the access interface layer includes:

a channel management server [see Jorgensen, ABSTRACT];
a policy enforcement server [see Jorgensen, col. 77, line 1];
an administration and maintenance server [see Jorgensen, ABSTRACT];
and a radio frequency server [see Jorgensen, ABSTRACT, col. 38, lines 11-19];

22. Since all the claims limitations are disclosed by the combination inventions of Jorgensen and Hanson, claims 1-78 are rejected.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Ejzak, U.S. Patent No 5,606,595, disclosed equal access to inter-exchange carriers in a mobile wireless packet data communication system.
- b. Dugan et al., U.S. Patent No 6,363,411, disclosed intelligent network.
- c. Govett, U.S. Patent No 5,761,507, disclosed client/server architecture supporting concurrent servers.
- d. Bert et al., U.S. Patent No 6,084,879, disclosed technique for capturing information needed to implement transmission priority routing.

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- e. Reisman, U.S. Patent No 6,125,388, disclosed system for transporting information objects between a user station and multiple remote sources based upon user modifiable object manifest stored in the user station.
- f. Dynarski et al., U.S. Patent No 6,272,129, disclosed dynamic allocation of wireless mobile nodes over an internet protocol (IP) network.
- g. Perkins, C., "IP Mobility Support", RFC 2002, October, 1996, PP 1-74.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lambert L. Tran whose telephone number is (703) 305-4663.

The examiner can normally be reached on M-F at 9AM - 5PM.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9700.

L.L.T
Assistant Examiner
GAU 2142
December 1, 2003

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